

Remarks

Reconsideration of this application is requested. By this response to the Office Action dated August 26, 2004, claims 1-3 and 17-19 were amended and claims 14-16 and 20-21 were canceled. A listing of these claims and the actions taken is included in this amendment. Claims 1-3 and 17-19 remain in the application.

Objection to the drawings

The drawings were objected to because FIG. 3 included encircled letters "A", "B" and "C". The Examiner further objected to the drawings, in particular FIG. 4, for failing to comply with 37 CFR 1.84(p)(5).

Applicants are enclosing a copy of FIGs. 1-3 with red markings to indicate proposed changes. Note that the new FIG. 3 is submitted with the encircled letters having been removed from the figure and reference numbers substituted. Also, by this amendment, FIG. 4 has been removed along with the mention of this figure in the Brief Description of the Drawings and in the specification.

No other changes to the figures have been made.

Objection to the specification

The Office Action states that the disclosure is objected to for several informalities. In accordance with 37 CFR 1.121, the amendments to the paragraphs in the specification include an instruction that unambiguously identifies the paragraph. Also included is the full text of the paragraph with markings to show all the changes relative to the previous version of the paragraph.

The Examiner objects to the term "multi-protocol" having been used in the disclosure. Applicant finds that term in the Title, and a change has been requested in the title to replace "multi-protocol" with "multiple protocol".

The Examiner objects to the antecedent basis of the paragraph found on page 6, lines 18-20, for the terms "desired protocol" and "selected protocol". Appropriate changes to the paragraph have been made.

The Examiner objects to the term “during demolition of data” in the paragraph found on page 9, line 11. Appropriate changes to the paragraph have been made.

The Examiner objects to FIG. 4 being mentioned but not described in the specification. By this amendment, FIG. 4 has been deleted and all references to that figure have been deleted from the specification.

Additional changes to the specification have been made to correct the use of encircled letters in FIG. 3. The replacement of encircled letters made in the figure have been also corrected in the specification.

Response to the 35 U.S.C. §112 Rejection

The Office Action mailed August 26, 2004, rejects claim 14 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Office Action further rejects claims 7 and 8 under 35 U.S.C. §112, second paragraph, for insufficient antecedent basis for the claim limitations.

By this amendment claims 7, 8 and 14 were canceled, and therefore, the rejection under 35 U.S.C. §112 should be removed.

Response to the 35 U.S.C. §102(e) Rejection

The Office Action rejected claims 1-21 under 35 U.S.C. §102(e) as being anticipated by Raichle et al. (U.S. Patent No. 6,603,394).

Claims 1-3

Applicant’s amended claim 1 recites, among other things, configuring a datapath from several predefined configurations to receive the modulated data from the antenna, wherein the configuration selected for the datapath corresponds to a protocol of the received modulated data; and demodulating the received modulated data in the datapath in accordance with the selected protocol.

Support for the amended language of Applicant’s claims 1-3 can be found in FIG. 2 that shows the predefined, reconfigurable datapaths coupled to

input antenna 52. Further support may be found at least on page 2, line 18, and continuing to page 4, line 2.

Raichle et al. teach in FIG. 1A a wireless communication module 100 having a motor vehicle communication interface 116 to receive vehicle diagnostic data. An FPGA 114 communicates with the motor vehicle control unit through translator 110 and interface 116. Raichle et al. teach in column 4, lines 5-17, that FPGA 114 provides a multiple communication protocol interface between processor 102 and the motor vehicle control unit. The multiple communication protocol interface 116 converts data from a protocol implemented by the motor vehicle control unit into a readable format acceptable to processor 102. This data conversion allows processor 102 to provide test signals to the motor vehicle control unit and receive error codes from vehicle actuators and sensors.

Note that the communication protocols taught by Raichle et al. are not wireless, over-the-air signals. Rather, these communication protocols are described in column 3, lines 38-47, and include ISO 9141 that is a standard for diagnostic signaling between a vehicle and a scan tool; the SAE J1850 Communications Standard utilized in on-and off-road land-based vehicles; Chrysler collision detection; etc.

Wireless communication module 100 also includes an RF interface 104 to transmit over-the-air signals from antenna 106. This output provides modulated RF output signals of vehicle data to a remote diagnostic technician (see column 4, lines 18-27). Note that these modulated signals are not affected by FPGA 114, and that the reconfigurable chip is used to convert vehicle signals, actuator signals and sensor signals into standard signals used by processor 102.

In contrast to Raichles' reconfigurable circuit (FPGA 114) that converts vehicle signals to processor signals, Applicant's amended claim 1 recites that a datapath is configured from several predefined configurations to receive the modulated data from the antenna. Thus, Applicant's claim calls for a datapath that is configured to receive a modulated signal, whereas, Raichles' reconfigurable circuit (FPGA 114) does not receive a modulated signal. Raichle et al. include a reconfigurable circuit to accommodate the interface to receive

signals from the various types of vehicles. Since this feature of Applicant's claim 1 is not taught or suggested by Raichle et al., the relied upon reference cannot anticipate Applicant's claim 1.

Applicant's claims 2-3 depend from base claim 1 and are believed to be allowable over the art of record for at least the same reasons as Applicant's claim 1.

Claims 4-16

Claims 4-16 have been canceled by this amendment, and therefore, the rejection of these claims is now moot.

Claims 17-19

Applicant's claim 17 recites, among other things, a datapath coupled to the antenna, and a controller to select a protocol and reconfigure the datapath to accept modulated data from the antenna and provide demodulated data in accordance with the protocol.

In contrast to Raichles' reconfigurable circuit (FPGA 114) that converts vehicle signals to processor signals, Applicant's amended claim 17 recites a reconfigurable datapath to accept modulated data from the antenna. Certainly Raichle et al. do not teach this claimed feature, and accordingly, the relied upon art cannot anticipate Applicant's claim 17. Again, Applicant's claim 17 includes a reconfigurable datapath that accepts modulated data, a feature not taught or suggested by Raichle et al.

Applicant's claims 18 and 19 depend from base claim 17 and are believed allowable over the prior art of record for at least the same reasons as Applicant's base claim 17.

Claims 19-21

Applicant's claims 19-21 have been canceled by this amendment, and therefore, the rejection of these claims under 35 U.S.C. §103(a) is now moot.

Conclusion

The foregoing is submitted as a full and complete response to the Office Action mailed August 26, 2004, and reconsideration of the objections and rejections is requested. It is submitted that claims 1-3 and 17-19 are now in condition for allowance. Allowance of these claims is earnestly solicited.

Applicants herewith petition the Director of the United States Patent and Trademark Office to extend the time for response to the Office Action dated August 26, 2004, for 1 month. Please charge Deposit Account #50-0221 in the amount of \$120.00 for a one month extension. Should it be determined that an additional fee is due under 37 CFR §1.16 or 1.17, or any excess fee has been received, please charge that fee or credit the amount of overcharge to deposit account #50-0221.

If the Examiner believes that there are any informalities that can be corrected by an Examiner's amendment, a telephone call to the undersigned at (480) 715-5388 is respectfully solicited.

Respectfully submitted,
Craig B. Greenberg



Lanny L. Parker
Patent Agent
Reg. No. 44,281

c/o Blakely, Sokoloff, Taylor & Zafman, LLP
12400 Wilshire Blvd., Seventh Floor
Los Angeles, CA 90025-1026
(503) 264-0967

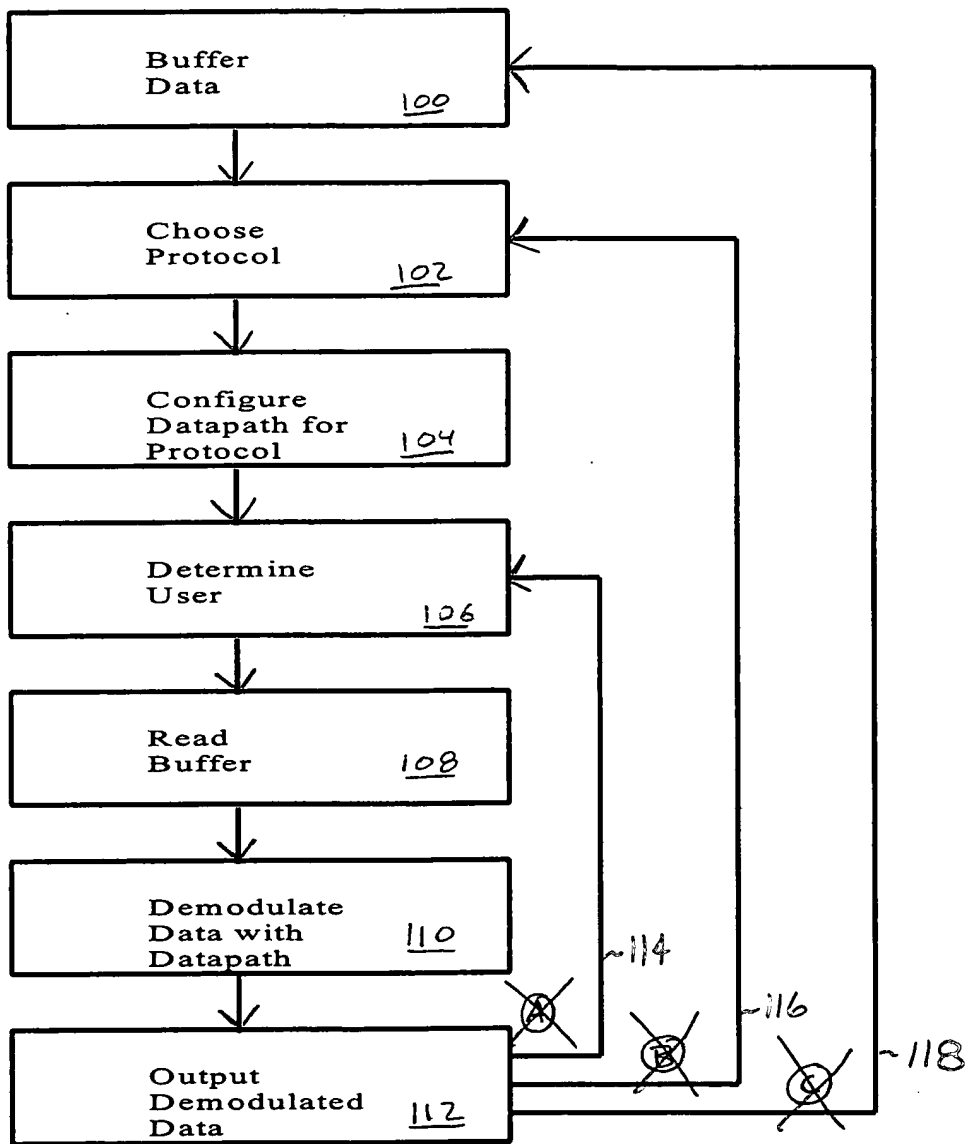
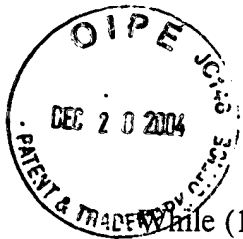


Figure 3



While (1)

```
{  
    get_input_data_in_buffer();  
    for ( i_protocol; i_protocol < N_protocols; i_protocol ++ )  
    {  
        configure_protocol(i_protocol);  
        for ( i_user; i_user < N_users_in_protocol[i_protocol]; i_user ++ )  
        {  
            feed_buffered_data();  
            demodulation(i_protocol, i_user);  
        }  
    }  
}
```

FIG. 4

PLEASE DELETE
FIG. 4